	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	9590	epidermal adj growth adj factor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:49			0
2	BRS	L2	1004	(epidermal adj growth adj factor) same modif$7	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:36			0
3	BRS	L3	297	laminin adj receptor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:36			0
4	BRS	L4	139	(laminin adj receptor) same (antagonist or agonist or binding)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:37			0
5	BRS	L5	1	2 same 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:37			0
6	BRS	L6	18	(epidermal adj growth adj factor) same (33-42)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:59			0
7	BRS	L7	0	6 same modif$7	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:58			0
8	BRS	L8	0	6 same (tic or citrulline)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 18:59			0
9	BRS	L9	3	(laminin adj receptor) same (antagonist or agonist) same retinopathy	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:02			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
10	BRS	L10	0	(laminin adj receptor) same (antagonist or agonist) same (endothelial adj cell adj wounding)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:02			0
11	BRS	L11	343	nelson adj john.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:04			0
12	BRS	L12	59	walker adj brian.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:04			0
13	BRS	L13	3	mcferran adj neil.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:04			0
14	BRS	L14	2	harriott adj patrick.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:05			0
15	BRS	L17	1	(11 or 12 or 13 or 14) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/04 19:06			0

=> d his

(FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
19:10:12 ON 04 MAR 2003
L1 136979 S (EPIDERMAL GROWTH FACTOR)
L2 29 S L1 (P) (33-42)
L3 4197 S L1 (P) MODIF?
L4 1 S L2 (P) MODIF?
L5 4070 S LAMININ RECEPTOR
L6 1296 S L5 (P) (ANTAGONIST OR AGONIST OR BINDING)
L7 9 S L6 (P) (L2 OR L3)
L8 4 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9 3 S L8 NOT L4
L10 5 S L3 (P) (TIC OR CITRULLINE)
L11 1 DUPLICATE REMOVE L10 (4 DUPLICATES REMOVED)
L12 1 S L11 NOT L4
L13 71189 S RETINOPATHY OR (ENDOTHELIAL CELL WOUNDING)
L14 6 S L13 (P) L6
L15 1 S L14 (P) L1
L16 0 S L15 NOT L4

=> log y

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FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.21       0.21

FILE 'MEDLINE' ENTERED AT 19:10:12 ON 04 MAR 2003

FILE 'CAPLUS' ENTERED AT 19:10:12 ON 04 MAR 2003
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FILE 'AGRICOLA' ENTERED AT 19:10:12 ON 04 MAR 2003

=> s (epidermal growth factor)
L1      136979 (EPIDERMAL GROWTH FACTOR)

=> s l1 (p) (33-42)
L2          29 L1 (P) (33-42)

=> s l1 (p) modif?
L3        4197 L1 (P) MODIF?

=> s l2 (p) modif?
L4           1 L2 (P) MODIF?

=> d l4 1 ibib

L4   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         1999:691122  CAPLUS
DOCUMENT NUMBER:          131:295932
TITLE:                    Peptide fragments of murine epidermal growth factor as
                          laminin receptor targets for treatment of angiogenic
                          diseases
INVENTOR(S):              Nelson, John; Walker, Brian; McFerran, Neil; Harriott,
                          Patrick
PATENT ASSIGNEE(S):       The Queen's University of Belfast, UK
SOURCE:                   PCT Int. Appl., 35 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 9954356         A1   19991028       WO 1999-GB1211   19990421
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9936168         A1   19991108       AU 1999-36168    19990421
     EP 1073679         A1   20010207       EP 1999-918126   19990421
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: GB 1998-8407 A 19980422
WO 1999-GB1211 W 19990421

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 19:10:12 ON 04 MAR 2003
L1 136979 S (EPIDERMAL GROWTH FACTOR)
L2 29 S L1 (P) (33-42)
L3 4197 S L1 (P) MODIF?
L4 1 S L2 (P) MODIF?

=> s laminin receptor
L5 4070 LAMININ RECEPTOR

=> s l5 (p) (antagonist or agonist or binding)
L6 1296 L5 (P) (ANTAGONIST OR AGONIST OR BINDING)

=> s l6 (p) (l2 or l3)
L7 9 L6 (P) (L2 OR L3)

=> duplicate remove l7
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L7
L8 4 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)

=> s l8 not l4
L9 3 L8 NOT L4

=> d l9 1-3 ibib abs

L9 ANSWER 1 OF 3 MEDLINE
ACCESSION NUMBER: 96421617 MEDLINE
DOCUMENT NUMBER: 96421617 PubMed ID: 8824265
TITLE: Murine epidermal growth factor peptide (33-42) binds to a YIGSR-specific laminin receptor on both tumor and endothelial cells.
AUTHOR: Nelson J; Scott W N; Allen W E; Wilson D J; Harriott P; McFerran N V; Walker B
CORPORATE SOURCE: Centre for Peptide and Protein Engineering, School of Biology and Biochemistry, The Queen's University of Belfast, Belfast BT9 7BL, Northern Ireland, United Kingdom.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Oct 18) 271 (42) 26179-86.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199611
ENTRY DATE: Entered STN: 19961219
Last Updated on STN: 20000303
Entered Medline: 19961126

AB A laminin- ***antagonist*** peptide, comprising amino acids ***33*** - ***42*** of murine ***epidermal*** ***growth*** ***factor*** (mEGF-(***33*** - ***42***)), interacts with a breast cancer- and endothelial cell-associated receptor, which is specific for the laminin B1 chain sequence, CDPGYIGSR-NH2 (Lam.B1-(925-933)), and is immunologically similar to a previously described 67-kDa ***laminin*** ***receptor*** . In whole cell receptor assays, mEGF-(***33*** - ***42***), Lam. B1-(925-933), and laminin all have IC50 values for displacement of 125I-laminin in the range 1-5 nM. Cell attachment to solid-phase laminin is also blocked by all three ligands, but in contrast to the receptor assays, mEGF-(***33*** - ***42***) or

Lam.B1-(925-933), while equipotent with each other, were less effective than laminin. The concentrations of the peptides required to produce half-maximal inhibition of attachment were in the range 230-390 nM, but those for laminin were 1000-fold lower, in the range 0.2-0.3 nM. Like laminin, solid-phase mEGF-(***33*** - ***42***) supports cell attachment, and this ability is blocked by anti-67-kDa receptor antibodies. Modeling studies suggest that both peptides present a tyrosyl and an arginyl residue on the same face of a right-handed helical fold with elliptical cross-section.

L9 ANSWER 2 OF 3 MEDLINE
ACCESSION NUMBER: 86199471 MEDLINE
DOCUMENT NUMBER: 86199471 PubMed ID: 3457945
TITLE: Chemotaxis of human gingival epithelial cells to laminin. A mechanism for epithelial cell apical migration.
AUTHOR: Terranova V P; Lyall R M
SOURCE: JOURNAL OF PERIODONTOLOGY, (1986 May) 57 (5) 311-7. Journal code: 8000345. ISSN: 0022-3492.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Dental Journals; Priority Journals
ENTRY MONTH: 198606
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860613

AB Laminin, a large glycoprotein (Mr = 10(6)) and a major component of basement membrane, is shown here to be a potent chemoattractant for human gingival epithelial cells. Laminin stimulated chemotaxis and chemokinesis of gingival epithelial cells in the ***modified*** Boyden chamber assay. This effect appeared to be ***laminin*** ***receptor*** mediated. Gingival epithelial cells were shown to bind laminin (Kd = 2.0 nM) with 10,000 to 30,000 ***binding*** sites per cell. Antilaminin antibody, which inhibited laminin ***binding*** , inhibited the chemotactic response of epithelial cells to laminin, while antifibronectin was without effect. Fibronectin was not as potent a chemoattractant as laminin. Other biological response ***modifiers*** were also tested; of these, Type IV collagen and ***epidermal*** ***growth*** ***factor*** were active as chemoattractants, although not as effective in inducing chemotaxis as laminin. The data indicate that laminin and other components of basement membrane may be important in regulating the migration and growth of gingival epithelial cells.

L9 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:111703 BIOSIS
DOCUMENT NUMBER: PREV200200111703
TITLE: Synthetic peptides interacting with the 67-kd laminin receptor can reduce retinal ischemia and inhibit hypoxia-induced retinal neovascularization.
AUTHOR(S): Gebarowska, Dorota; Stitt, Alan W. (1); Gardiner, Thomas A.; Harriott, Patrick; Greer, Brett; Nelson, John
CORPORATE SOURCE: (1) Center of Ophthalmology and Vision Science, The Queen's University of Belfast, Royal Victoria Hospital, Belfast, BT12 6BA: a.stitt@qub.ac.uk UK
SOURCE: American Journal of Pathology, (January, 2002) Vol. 160, No. 1, pp. 307-313. http://ajp.amjpathol.org/. print. ISSN: 0002-9440.
DOCUMENT TYPE: Article
LANGUAGE: English

AB The high-affinity 67-kd laminin receptor (67LR) is expressed by proliferating endothelial cells during retinal neovascularization. The role of 67LR has been further examined experimentally by administration of selective 67LR agonists and antagonists in a murine model of proliferative retinopathy. These synthetic 67LR ligands have been previously shown to stimulate or inhibit endothelial cell motility in vitro without any direct effect on proliferation. In the present study, a fluorescently labeled 67LR antagonist (EGF33-42) was injected intraperitoneally into mice and its distribution in the retina was assessed by confocal scanning laser microscopy. Within 2 hours this peptide was localized to the retinal vasculature, including preretinal neovascular complexes, and a significant amount had crossed the blood retinal barrier. For up to 24 hours postinjection, the peptide was still present in the retinal vascular walls

and, to a lesser extent, in the neural retina. Non-labeled EGF33-42 significantly inhibited pre-retinal neovascularization in comparison to controls treated with phosphate-buffered saline or scrambled peptide ($P < 0.0001$). The agonist peptide (Lambeta1925-933) also significantly inhibited proliferative retinopathy; however, it caused a concomitant reduction in retinal ischemia in this model by promoting significant revascularization of the central retina ($P < 0.001$). Thus, 67LR appears to be an important target receptor for the modulation of retinal neovascularization. Agonism of this receptor may be valuable in reducing the hypoxia-stimulated release of angiogenic growth factors which drives retinal angiogenesis.

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=> d his

     (FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     19:10:12 ON 04 MAR 2003
L1        136979 S (EPIDERMAL GROWTH FACTOR)
L2            29 S L1 (P) (33-42)
L3          4197 S L1 (P) MODIF?
L4             1 S L2 (P) MODIF?
L5          4070 S LAMININ RECEPTOR
L6          1296 S L5 (P) (ANTAGONIST OR AGONIST OR BINDING)
L7             9 S L6 (P) (L2 OR L3)
L8             4 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9             3 S L8 NOT L4

=> s l3 (p) (tic or citrulline)
L10            5 L3 (P) (TIC OR CITRULLINE)

=> duplicate remove l10
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L10
L11            1 DUPLICATE REMOVE L10 (4 DUPLICATES REMOVED)

=> s l11 not l4
L12            1 L11 NOT L4

=> d l12 1 ibib abs

L12  ANSWER 1 OF 1     MEDLINE
ACCESSION NUMBER:    93248272     MEDLINE
DOCUMENT NUMBER:     93248272   PubMed ID: 7683432
TITLE:               Differential regulation of inducible nitric oxide synthase
                     by fibroblast growth factors and transforming growth factor
                     beta in bovine retinal pigmented epithelial cells: inverse
                     correlation with cellular proliferation.
AUTHOR:              Goureau O; Lepoivre M; Becquet F; Courtois Y
CORPORATE SOURCE:    Unite de Recherches Gerontologiques, Institut National de
                     la Sante et de la Recherche Medicale U118, Paris, France.
SOURCE:              PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE
                     UNITED STATES OF AMERICA, (1993 May 1) 90 (9) 4276-80.
                     Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         199306
ENTRY DATE:          Entered STN: 19930618
                     Last Updated on STN: 20000303
                     Entered Medline: 19930601
AB   Bovine retinal pigmented epithelial (RPE) cells express, after activation
     with interferon gamma (IFN-gamma) and lipopolysaccharide (LPS), an
     inducible nitric oxide synthase (NOS). Experiments were done to
     investigate the effects of the transforming growth factor beta 1,
       ***epidermal***     ***growth***     ***factor***  , and fibroblast growth
     factors (FGFs), which are abundant in the retina, on NOS activity.
     Transforming growth factor beta 1 slightly increases the production of
     nitrite, an oxidation product of NO, induced by LPS plus IFN-gamma,
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whereas acidic and basic FGFs markedly inhibit the nitrite release due to LPS/IFN-gamma in a concentration dependent manner, and ***epidermal*** ***growth*** ***factor*** did not ***modify*** LPS/IFN-gamma-induced NOS activity. The growth factors alone did not stimulate nitrite release. We have attempted to elucidate the mechanism of FGF inhibition. Results with heparin, suramin, and tyrphostin suggest involvement of the high-affinity receptor for FGF in its inhibition of LPS/IFN-gamma-stimulated NOS activity. Continued stimulation of RPE cells with LPS/IFN-gamma was essential for the induction of NO synthesis, and maximal inhibition was obtained when FGF was present during stimulation with LPS/IFN-gamma, suggesting that FGF inhibits NOS induction. Furthermore, an antiproliferative action of NO was demonstrated by an inverse correlation between the amounts of nitrite or ***citrulline*** produced in response to different stimuli (LPS/IFN-gamma or LPS/IFN-gamma with growth factors) and the level of cellular proliferation. Similar inhibition of growth was obtained when RPE cells were incubated with an NO donor, sydnonimide. Because NO acts as a cytotoxic compound in the retina, FGF, by inhibiting the induction of NOS in RPE cells, may have beneficial effects in protecting the retina from cytokine and endotoxin-mediated tissue damage.

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     (FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     19:10:12 ON 04 MAR 2003
L1        136979 S (EPIDERMAL GROWTH FACTOR)
L2            29 S L1 (P) (33-42)
L3          4197 S L1 (P) MODIF?
L4             1 S L2 (P) MODIF?
L5          4070 S LAMININ RECEPTOR
L6          1296 S L5 (P) (ANTAGONIST OR AGONIST OR BINDING)
L7             9 S L6 (P) (L2 OR L3)
L8             4 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9             3 S L8 NOT L4
L10            5 S L3 (P) (TIC OR CITRULLINE)
L11            1 DUPLICATE REMOVE L10 (4 DUPLICATES REMOVED)
L12            1 S L11 NOT L4

=> s retinopathy or (endothelial cell wounding)
   4 FILES SEARCHED...
L13       71189 RETINOPATHY OR (ENDOTHELIAL CELL WOUNDING)

=> s l13 (p) l6
L14            6 L13 (P) L6

=> s l14 (p) l1
L15            1 L14 (P) L1

=> s l15 not l4
L16            0 L15 NOT L4

=> d his

     (FILE 'HOME' ENTERED AT 19:09:46 ON 04 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     19:10:12 ON 04 MAR 2003
L1        136979 S (EPIDERMAL GROWTH FACTOR)
L2            29 S L1 (P) (33-42)
L3          4197 S L1 (P) MODIF?
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L5          4070 S LAMININ RECEPTOR
L6          1296 S L5 (P) (ANTAGONIST OR AGONIST OR BINDING)
L7             9 S L6 (P) (L2 OR L3)
L8             4 DUPLICATE REMOVE L7 (5 DUPLICATES REMOVED)
L9             3 S L8 NOT L4
L10            5 S L3 (P) (TIC OR CITRULLINE)
L11            1 DUPLICATE REMOVE L10 (4 DUPLICATES REMOVED)
L12            1 S L11 NOT L4
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L13        71189 S RETINOPATHY OR (ENDOTHELIAL CELL WOUNDING)
L14            6 S L13 (P) L6
L15            1 S L14 (P) L1
L16            0 S L15 NOT L4

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